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## PROVISIONAL SPECIFICATION.

## Improvements in Automatic Fire Extinguishing Sprinklers.

I, JAMES HENRY LYNDE, of Buckland, Ashton on Mersey, in the County of Chester, Civil Engineer, do hereby declare the nature of this invention to be as follows:—

My invention relates to improvements in the automatic fire extinguishing  
5 sprinkler for which I obtained Letters Patent numbered 20421 and dated December 19th 1889.

In the drawings forming part of the Specification to my aforesaid Patent I show a sprinkler with a valve face maintained in close contact with a valve seat  
10 by means of two compound levers which are secured in position by a special form of sensitive solder joint or connection.

My present improvements consist in the arrangement use and application of three or more compound levers in combination with the valve face and sensitive solder joint and in substitution for the arrangement of two compound levers shown and described in my aforesaid Specification.

15 Dated this 4th day of January 1895.

H. B. BARLOW & GILLET, Agents for Applicant.

## COMPLETE SPECIFICATION.

## Improvements in Automatic Fire Extinguishing Sprinklers.

20 I, JAMES HENRY LYNDE, of Buckland, Ashton on Mersey, in the County of Chester, Civil Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

My invention relates to improvements in the automatic fire extinguishing  
25 sprinkler for which I obtained Letters Patent numbered 20421 and dated December 19th 1889.

In the drawings forming part of the Specification to my aforesaid Patent I show a sprinkler with a valve face maintained in close contact with a valve seat  
30 by means of two compound levers which are secured in position by a special form of sensitive solder joint or connection.

My present improvements consist in the arrangement use and application of three or more compound levers in combination with the valve face and sensitive solder joint and in substitution for the arrangement of two compound levers shown and described in my aforesaid Specification.

35 And in order that my invention may be fully understood and readily carried into effect I will describe the accompanying sheet of drawings reference being had to the figures and letters marked thereon.

Fig. 1 is an elevation and Fig. 2 a vertical section of an automatic fire extinguishing sprinkler constructed substantially as described in my aforesaid  
40 Patent Specification and to which my present improvements are applied, and Fig. 3 is a sectional plan view on the line A B, Fig. 2.

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*Lynde's Improvements in Automatic Fire Extinguishing Apparatus.*

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In these views,—*a* represents the body of the sprinkler; *b* the cover which is threaded onto the body *a*; *c* represents the distributor; *d* the stem which is attached to the distributor and supports it in its proper position when the sprinkler, which is shown in its closed position, is open, by means of a gallery *e* secured to the body *a* of the sprinkler; *f* represents the upper or primary lever which is shown of a channel section, one end of which is supported by the internal lip *b*<sup>1</sup> of the cover *b* and the other rests upon an intermediate or secondary lever *g*; one end of the lever *g* is supported by the internal lip *b*<sup>1</sup> and the other end rests upon the third lever *h*. The lever *h* is supported by the internal lip *b*<sup>1</sup> at one end and at the other is held in position by means of a sensitive joint or connection formed of flanged metallic tubes *k* and *l* fitting one within the other and soldered together with sensitive solder and insulated by non-conducting washers *i* for metallic contact with the parts of the sprinkler to which they are attached substantially as described in my aforesaid Patent Specification. 5 10

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:— 15

The combination with a sprinkler constructed substantially as herein shown and described, of an arrangement of three or more compound levers for holding the valve face to the valve seat the last of said levers being held in position by means of the sensitive solder joint, formed of flanged metallic tubes soldered together and insulated substantially as specified. 20

Dated this 3rd day of October 1895.

H. B. BARLOW & GILLETT,  
17 St. Ann's Square, Manchester, Agents for Applicant. 25

Fig. 1.

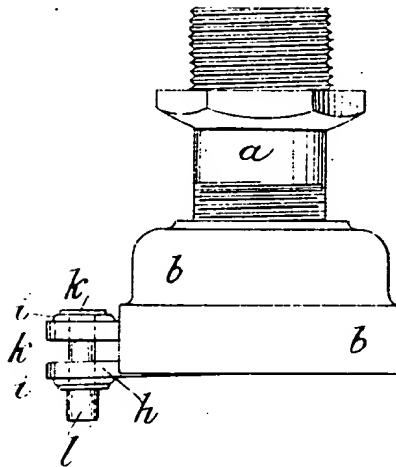


Fig. 2.

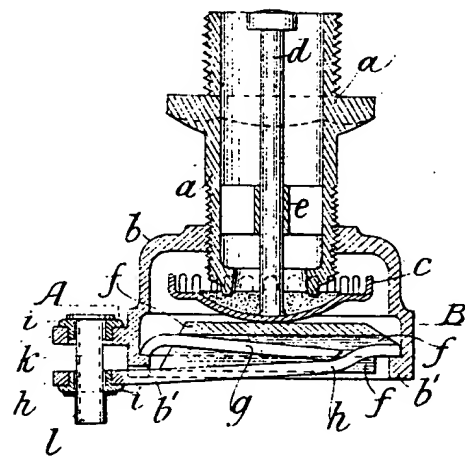
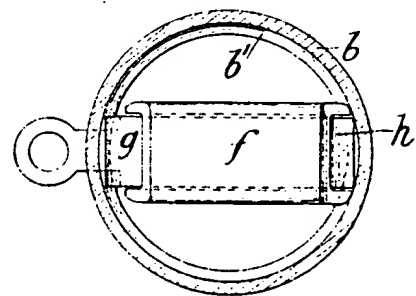


Fig. 3.



[This Drawing is a reproduction of the Original on a reduced scale.]